

## Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing

The objective of the “Nanotechnologies, Advanced Materials and Advanced Manufacturing and Processing” Work Programme is the successful mastering, integration and deployment of these enabling technologies by European industry. It is a key factor in strengthening Europe's productivity and innovation capacity and ensuring Europe has an advanced, sustainable and competitive economy, global leadership in high-tech application sectors and the ability to develop effective and sustainable solutions for societal challenges.

### Conditions:

A consortium generally needs to include a minimum of three independent participants from three different Member States or associated countries. For the SME instrument a single participant is allowed. The participation of third countries and international organisations is possible subject to conditions laid out in the Work Programme.

### 2019 call timetable<sup>\*)</sup> and indicative budgets:

CALL FOR FOUNDATION FOR TOMORROW'S INDUSTRY budget – 122,6 M€

Single stage proposals:	Opens: 16 Oct 2018	Closes: 03 Sep 2019
Two stage proposals:	Opens: 16 Oct 2018	Closes: 22 Jan 2019 (1. stage), 03 Sep 2019 (2.stage)

ALL FOR TRANSFORMING EUROPEAN INDUSTRY budget – 157 M€

Single stage proposals:	Opens: 16 Oct 2018	Closes: 21 Feb 2019
	Opens: 16 Oct 2018	Closes: 03 Mar 2019 (CE-BIOTEC-05-2019 (RIA))
Two stage proposals:	Opens: 16 Oct 2018	Closes: 22 Jan 2019 (1. stage), 03 Sep 2018 (2. stage)

CALL INDUSTRIAL SUSTAINABILITY budget – 211.76 M€

Single stage proposals:	Opens: 16 Oct 2018	Closes: 21 Feb 2019 (SPIRE&EEB)
Two stage proposals:	Opens: 16 Oct 2018	Closes: 22 Jan 2019 (1. stage), 3 Sep 2019 (2. stage)

### Sources of Information:

- European Commission's H2020 pages : <http://ec.europa.eu/research/horizon2020>
- European Commission Participant Portal: <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home>
- EU Research and Innovation Programme: <https://www.horisontti2020.fi>
- Partner Search: <http://www.nmpteam.com>

### Contact Information:

Hannu Juuso, NCP

National Contact Point

Business Finland, [www.businessfinland.fi](http://www.businessfinland.fi)

tel./SMS +358 50 5577 732

[hannu.juuso@businessfinland.fi](mailto:hannu.juuso@businessfinland.fi)

Kari Keskinen

Committee Delegate

Business Finland, [www.businessfinland.fi](http://www.businessfinland.fi)

tel./SMS +358 2950 55843

[kari.keskinen@businessfinland.fi](mailto:kari.keskinen@businessfinland.fi)

\*) Preliminary information, closing dates not confirmed for all calls

2019 calls: RIA = Research and Innovation Action, IA = Innovation Action, CSA = Coordination and Support Action

CALL FOR FOUNDATION FOR TOMORROW'S INDUSTRY – 122,6 M€	2019 Budget
<i>Open innovation test beds – 50 M€</i>	M€
DT-NMBP-03-2019: Open Innovation Test Beds for nano-enabled surfaces and membranes (IA, two-stage)	50.0
<i>Materials characterisation and computational modelling – 41,8 M€</i>	
DT-NMBP-08-2019: Real-time nano-characterisation technologies (RIA) (2 stage)	37.8
DT-NMBP-10-2019: Adopting materials modelling in manufacturing processes (RIA) (2 stage)	
DT-NMBP-12-2019: Sustainable Nano-Fabrication (CSA)	4.0
<i>Governance, science-based risk assessment and regulatory aspects – 30,8 m€</i>	
NMBP-15-2019: Safe by design, from science to regulation: metrics and main sectors (RIA) (2 stage)	27.8
NMBP-34-2019: In support of documentary standards (CSA) (deadline 03 Sep 2019)	3.0
CALL FOR TRANSFORMING EUROPEAN INDUSTRY – 188 M€	
<i>Factories of the future (fof)</i>	
DT-FOF-05-2019: Open Innovation for collaborative production engineering (IA)	106.6
DT-FOF-06-2019: Refurbishment and re-manufacturing of large industrial equipment (IA)	
DT-FOF-08-2019: Pilot lines for modular factories (IA 50%)	
DT-FOF-12-2019: Handling systems for flexible materials (RIA)	
DT-NMBP-18-2019: Materials, manufacturing processes and devices for organic and large area electronics (IA)	20.0
DT-NMBP-19-2019: Advanced materials for additive manufacturing (IA)	20.4
<i>Biotechnology – 41 M€</i>	
BIOTEC-02-2019: Boosting the efficiency of photosynthesis (RIA) (2 stage)	31.0
CE-BIOTEC-05-2019: Microorganism communities for plastics bio-degradation (RIA)	10.0
CALL INDUSTRIAL SUSTAINABILITY – 211.76 M€ (2019 calls)	
<i>Sustainable process industry (SPIRE) 98,7 M€</i>	
CE-SPIRE-04-2019: Efficient integrated downstream processes (IA)	65.8
CE-SPIRE-05-2019: Adaptation to variable feedstock through retrofitting (IA 50%)	
DT-SPIRE-06-2019: Digital technologies for improved performance in cognitive production plants (IA)	32.9
<i>Catalysing the circular economy – 18.46 M€</i>	
CE-NMBP-25-2019: Photocatalytic synthesis (RIA) (2 stage)	18.46
<i>Clean energy through innovative materials – 41.1 M€</i>	
LC-NMBP-29-2019: Materials for non-battery based energy storage (RIA) (2 stage)	41.1
C-NMBP-32-2019: Smart materials, systems and structures for energy harvesting (RIA) (2 stage)	
<i>Energy-efficient buildings (EEB) – 53.5 M€</i>	
LC-EEB-01-2019: Integration of energy smart materials in non-residential buildings (IA)	53.5
LC-EEB-03-2019: New developments in plus energy houses (IA)	
LC-EEB-05-2019-20: Integrated storage systems for residential buildings (IA)	

Additionally there will also be other NMPB related calls available :

CALL: EIC HORIZON PRIZE FOR 'INNOVATIVE BATTERIES FOR EVEHICLES' - 10 M€

Batteries-EICPrize-2018: EIC Horizon Prize for 'Innovative Batteries for eVehicles'

CALL: BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: NEXT-GENERATION BATTERIES

Call identifier: H2020-LC-BAT-2019-2020; Publication date: 27 October 2017, Opening date: 24 January 2019, Deadline: 25 April 2019 (all)

LC-BAT-1-2019: Strongly improved, highly performant and safe all solid state batteries for electric vehicles (RIA)

LC-BAT-2-2019: Strengthening EU materials technologies for non-automotive battery storage (RIA) (earlier LC-NMBP-27-2019)

LC-BAT-3-2019: Modelling and simulation for Redox Flow Battery development (RIA)

LC-BAT-4-2019: Advanced Redox Flow Batteries for stationary energy storage (RIA)

LC-BAT-5-2019: Research and innovation for advanced Li-ion cells (generation 3b) (RIA)

LC-BAT-6-2019: Li-ion Cell Materials & Transport Modelling (RIA)

LC-BAT-7-2019: Network of Li-ion cell pilot lines (CSA)

Please see the Work Programme in question for more information.

Disclaimer: The information provided in this handout is based on the draft Work Programme and is subject to change. Applicants must check the information in the Participant Portal.